

REMARKS

A. Request for Reconsideration

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action dated March 18, 2009 but remain of the opinion that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the above amendments to the claims, the Certified English Translation of the claims of the Japanese Priority Document JP 2003-197799 and the following remarks.

B. Claims Status

Claims 1-26 are pending in this Application, claims 1, 2, and 4 have been amended herein.

Claims 1, 2 and 3 have been amended herein to recite that high frequency electric field A is formed by superposing a first high frequency electric field and a second high frequency electric field. Support for this amendment can be found, for example, in claim 4 and on page 47, line 19-page 66, line 24. The amendments are also supported in claim 7 of the priority application, JP2003-197799 (see attached certified translation of the claims of JP2003-197799).

Since this limitation was also in Claim 4 and Claim 4 is dependent upon Claim 3, Claim 4 has been amended to delete this limitation.

Respectfully, no new matter has been added herein.

C. Priority Document

Applicants have attached a Certified English Translation of the claims of the Japanese Priority Document JP 2003-197799 in order to perfect their priority with respect to electric field A and take their date back to July 16, 2003. Claim 7 of the attached Priority Document supports the claim limitation of a high frequency electric field A formed by superposing a first high frequency electric field and a second high frequency electric field, as recited in claims 1, 2, 3 and 17.

Support for the claim limitation of a high frequency electric field A formed by superposing a first high frequency electric field and a second high frequency electric field can also be found in Figure 1 of the Priority Document which is in the file. Figure 1 of the Priority Document corresponds with Figure 1 of the present application, and depicts the formation of the high frequency electric field A, which is formed by superposing two high frequency electric fields generated by electrodes 1 and 2 (see Figure 1 of the Priority Document, and corresponding electrodes 7 and 8 of the present application).

Respectfully, in view of the English Translation of the claims of Applicants' Priority Document, Applicants have perfected their date of priority. This will be used in responding to the Office Action as discussed in more detail below.

D. Prior Art Rejection

The Examiner made the following two rejections:

(1) Claims 1-3, 12, 14, 15 and 16 are rejected under 35 USC 103 as being unpatentable over Horiike (US 5,290,609) in view of Fukuda '479 (US 2003/0113479) and further in view of Hwang (US 2002/0043216); and

(2) Claims 4-11, 13 and 17-26 are rejected under 35 USC 103 as being unpatentable over Horiike in view of Fukuda '479, Hwang and Fukuda '136 (US 2003/0232136).

Turning to rejection (1), Applicants note that the Examiner did not reject claim 4 as being unpatentable over Horiike, Fukuda '479 and Hwang. Thus, in light of amending claims, 1, 2 and 3 to recite the limitations of claim 4, namely that a high frequency electric field A is formed by superposing a first high frequency electric field and a second high frequency electric field, rejection (1) is now moot.

Turning to rejection (2), Fukuda '136 had been cited to teach superimposing two electric fields on each other and having the frequency and the intensity substantially as claimed.

Fukuda '136 has a U.S. filing date and a publication date prior to the filing date but after the Japanese Priority Date of this application. Applicants have submitted a Certified English Translation of the claims of the Priority Document in order to perfect their priority with respect to electric field A and submit that Fukuda '136 is now prior art only in accordance with 102(e).

Furthermore, because this is a 103 rejection and Fukuda '136 is prior art under 102(e), Applicants hereby make the following statement in accordance with 103(c) to remove Fukuda '136 as prior art:

The subject matter of Fukuda '136 and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person. *Id.*

Respectfully, Applicants have removed Fukuda '136 as effective prior art under 103. Thus, Applicants submit that the Examiner's rejection has been overcome.

Moreover, none of the references cited by the Examiner, either alone or in combination, replace Fukuda '136. In order to form a thin layer of atomic order, the ALD method in Hwang

requires four steps, including (1) supplying and reacting raw material gas (Tri-methyl aluminum), (2) supplying purge gas (Argon), (3) supplying reactive gas (water vapor) and (4) supplying purge gas (Argon) in one cycle. Not only is this method far from the high speed atmospheric pressure plasma method claimed herein, but there is no disclosure anywhere in Hwang of high frequency electric field A formed by superposing a first high frequency electric field and a second high frequency electric field. With respect to Fukuda '479 and Horiike, the Examiner recognized that neither of these references teach high frequency electric field A formed by superposing a first high frequency electric field and a second high frequency electric field (see page 5 of the Office Action).

Since none of the references cited by the Examiner, either alone or in combination, teach a high frequency electric field A formed by superposing a first high frequency electric field and a second high frequency electric field, it is respectfully submitted that the claims presented herein are patentable over the Examiner's rejections.

D. Conclusion

In view of the foregoing, it is respectfully submitted that the Application is in condition for allowance and such action is respectfully requested.

Should any fees or extensions of time be necessary in order to maintain this Application in pending condition, appropriate requests are hereby made and authorization is given to debit account #02-2275.

Respectfully submitted,

LUCAS & MERCANTI, LLP

By: 

Christina M. Jordan, Reg. #61,098
(Attorney for Applicants)
475 Park Avenue South
New York, New York 10016
Tel. # (212) 661-8000

DCL/CMJ/mr

Attached: Certified English Translation of the claims of the
Japanese Priority Document JP 2003-197799